

**REMARKS**

Amendments have been presented to claims 1, 16, and 27. Claims 39 and 40 have been added. No new matter has been added as a result of these amendments and new claims, support is found throughout the specification.

Claims 1-40 are pending.

**Claim rejections – 35 USC 102**

In the Office Action claims 1-4, 6-9, 11-20, 22-29, and 31-35 are rejected under 35 USC 102 as being anticipated by Chen. The Applicants herein traverse this rejection.

Claim 1 has been amended to clearly recite that the second access path is to provide access to at least one memory cell accessible through the first access path. It is clear that the access paths relied upon in Chen provide access to different memory sections and, therefore, different memory cells altogether. For example, X1 provides an access path to memory cells within Section 1 for the Arbitration Node #16 and the MRCA, while X8 provides the Arbitration Node #16 an access path to different memory cells, i.e., memory cells within Section 8.

Because Chen fails to disclose this element, claim 1 is patentable over Chen for at least this reason. Therefore, the Applicants respectfully request the Examiner to withdraw this rejection of this claim.

Furthermore, claims 2-4 and 6-7 depend from, and include the same limitations as, claim 1, and are patentably distinct from Chen for at least the above reason. Therefore, the Applicants respectfully request the Examiner withdraw these rejections of these claims.

Claim 8, recites:

In a memory unit of an integrated circuit (IC), a method of operation comprising:  
queuing first memory accesses of a processor and a plurality of subsystems of the IC in inbound queues of a first data transfer interface;

queueing second memory accesses of the processor in an inbound queue of a second data transfer interface; sequencing said first and second memory accesses into a single sequence of memory accesses; and servicing said first and second memory accesses in accordance with their sequence order.

It is clear that because the first and second "data transfer interfaces" of Chen access first and second distinct memory sections, there is no sequencing of the first memory accesses (from a first data transfer interface) and second memory access (from a second data transfer interface) into a single sequence of memory accesses.

Because this element is not found in Chen, this claim is patentable over Chen for at least this reason. Furthermore, claim 9 and 11-15 depend from, and include the same limitations as, claim 8 and are therefore patentable over Chen for at least the same reason.

Claim 16, as amended, includes a limitation similar to the above-discussed limitation of claim 1. Namely, a first and second access path to facilitate the access of the processor to at least one common memory cell. As discussed above, because Chen discloses access paths providing access to separate parts of the memory, this element is not anticipated by Chen, and therefore, this claim is patentable for at least this reason. Furthermore, claims 17-20 and 22-26 depend from, and include the same limitations as, claim 16. Therefore, these claims are patentable for at least the same reasons.

Claim 27, as amended, includes the processor and a plurality of subsystems making memory accesses of a memory unit via a first access path, and the processor making parallel memory accesses via a second access path, dedicated to the processor. It is clear that Chen does not provide a second access path dedicated to the processor. For example, X8 provides an access path for the Arbitration Node #16, including two processors, via line 50 and for the MRCA 48 (Fig. 3) via line 54.

Because Chen fails to disclose this element, claim 27 is patentable over Chen for at least this reason. Therefore, the Applicants respectfully request the Examiner to withdraw this rejection of this claim.

Furthermore, claims 28-29 and 31-35 depend from, and include the same limitations as, claim 27, and are patentably distinct from Chen for at least the above reason.

Claim rejections – 35 USC 103

Claims 5, 10, 21, and 30 are rejected under 35 USC 103(a) as being unpatentable over Chen in view of Agarwala.

Claim 5 depends on claim 4; claim 10 depends on claim 8; claim 21 depends on claim 20; and claim 30 depends on claim 28.

Because Chen does not teach at least one element of the underlying claims, i.e., claims 4, 8, 20, and 28, as described above, and further because Agarwala does not correct for these deficiencies, these claims are patentable over Chen and Agarwala for at least the same reason the underlying claims are patentable over Chen. Therefore, the Applicants respectfully request the Examiner to withdraw these rejections to these claims.

New Claims

Claims 39 and 40 have been added and both depend from, and are patentable over the cited articles for the same reasons as, claim 1.

Conclusion

In view of the foregoing, the Applicant respectfully submits that claims 1-40 are in condition for allowance. Thus, early issuance of Notice of Allowance is respectfully requested.

If the Examiner has any questions, he is invited to contact the undersigned at (503) 796-2972.

The Commissioner is hereby authorized to charge shortages or credit overpayments to Deposit Account No. 500393.

Respectfully submitted,  
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